# **CCR Seventh Annual Fellows and Young Investigators Retreat**

February 27 ~ March 1, 2007, Clarion Fontainebleau Hotel in Ocean City, MD

# **PROGRAM**

Tuesday, February 27, 2007	
	Poster Session I Setup (Crystal Ballroom Hall II)
3:30 p.m.	Plenary Session I (Crystal Ballroom Hall I)
	Opening Remarks and CCR-FYI Overview  Arti Santhanam, Ph.D., Chair, CCR-FYI Steering Committee
	Update on the National Postdoctoral Association (NPA)  Alyson Reed, Ph.D., National Postdoctoral Association
	FelCom Overview  Heidi Erickson, Ph.D., National Cancer Institute
4:15 p.m.	NCI's Administrative Resource Centers  Patrick Miller, ARC Manager, CCR, NCI  Moderators: Girish Patel, M.B.B.S, M.R.C.P., M.D.
4:30 p.m.	CCR Office of the Director Address/Open Forum  Robert Wiltrout, Ph.D., Director, CCR, NCI  Lee Helman, M.D., Ph.D., Acting Scientific Director for Clinical Research, CCR, NCI  Moderators: Arti Santhanam, Ph.D., and Veronica Hall, Ph.D.
5:15 p.m.	Postdoctoral Keynote Speaker: "Lessons Learned from Molecular Profiling of Hepatocellular Carcinoma"  Anuradha Budhu, Ph.D., Laboratory of Human Carcinogenesis, CCR, NCI  Moderators: Elena Ambrosino, Ph.D., and Kwang Suh, Ph.D.
6:15 p.m.	Mentored and General Dinner (Grand Ballroom – First Floor)
7:30 p.m.	Keynote Speaker I: "Cancer Stem Cells: A New Paradigm in Cancer Research"  Max Wicha, M.D., University of Michigan Comprehensive Cancer Center  Moderators: Veronica Hall, Ph.D., and Stephen Maher, Ph.D.
8:30 p.m.	Poster Session I (Crystal Ballroom II)  Molecular and Cell Biology I  Pharmacology, Chemistry, and Virology Carcinogenesis, Cancer Models, Epidemiology and Cancer Prevention Signal Transduction and Gene Transcription Genomics, Proteomics, and Bioinformatics

# Wednesday, February 28, 2007

**Informal Mixer** (Conference Rooms 1-3) **Mentored Meal Sign-up** (Registration Desk)

# 7:00 a.m. Continental Breakfast (Crystal Ballroom Foyer)

**Registration Open** 

# 8:00 a.m. Plenary Session II (Crystal Ballroom I)

#### Keynote Speaker II: "Conversations between Tissues and T Cells"

**Polly Matzinger, Ph.D.,** Laboratory of Cellular and Molecular Immunology, NIAID Moderators: Martin Guimond, Ph.D., and Swati Choksi, Ph.D.

### 9:00 a.m. Break

# 9:15 a.m. Concurrent Workshops I

#### **1. How to Succeed in Science** (Crystal Ballroom I)

#### "Science Careers at the National Cancer Institute"

Nancy Colburn, Ph.D., Laboratory of Cancer Prevention, CCR, NCI

#### "How to Succeed at an Academic Institution"

Robert A. Schlegel, Ph.D., Pennsylvania State University Moderators: Gillian Whittaker, Ph.D., and Jordan Irvin, Ph.D.

# 2. Science Careers for the 21<sup>st</sup> Century (Conference Rooms 4-6)

Howard Gadlin, Ph.D., Center for Cooperative Resolution, NIH Office of the Ombudsman Nicole Mahoney, Ph.D., Office of Technology Development, NIAID Rosanne Hurwitz, J.D., M.P.H., Ethics Office, NIH R. Alan Mufson, Ph.D., Cancer Immunology/Hematology Branch, DCB, NCI Moderators: Veronica Hall, Ph.D., and Stephen Maher, Ph.D.

# 10:30 a.m. Concurrent Oral Presentations I

# 1. Pharmacology, Virology, and Chemistry (Conference Room 1)

Moderators: Elena Ambrosino, Ph.D., and M. Margaret Pratt, Ph.D.

# Anna Maria Calcagno, Laboratory of Cell Biology

ABCG2: A Molecular Target During Early Stages of Multidrug Resistance Development in Breast Cancer Cells

# Himanshu Garg, Nanobiology Program

Mutational Analysis of HIV-1 gp41-Mediated Apoptosis and Its Correlation with Fusion/Hemifusion

# Sahar Javanmard, Laboratory of Comparative Carcinogenesis

Synthesis of Potential Tumor-Specific Chemotherapy Adjuvants: O<sup>6</sup>-Benzyl-2'-Deoxyguanosine and O<sup>6</sup>-[(4-hydroxymethyl)benzyl]guanine Folic Acid Conjugates

#### Vladimir Majerciak, HIV and AIDS Malignancy Branch

KSHV ORF57 Functions as a Splicing Factor in Promoting Viral RNA Splicing In Vivo

Andrew Jobson, Laboratory of Molecular Pharmacology
Identification and Characterization of Putative Chk2 Inhibitors

### 2. Carcinogenesis, Cancer Models, Epidemiology and Cancer Prevention

(Conference Rooms 4-6)

Moderators: Tamaro Hudson, Ph.D., M.P.H., and Haiqing Li, M.D., Ph.D.

### Jennifer Shen, Surgery Branch

Pancreatic Inactivation of Multiple Endocrine Neoplasia Type 1 (Men1) Gene Leads to Multistage Tumorigenesis and Vascular Alterations

### Sergey Kuznetsov, Mouse Cancer Genetics Program

Functional Analysis of BRCA2 Mutations Using and ES Cell-Based System

### Padmakumar Velayuthan, Mouse Cancer Genetics Program

Is p53 a Master Repressor of Cell Cycle?

### Dina Raafat, Laboratory of Cancer Biology and Genetics

Nitric Oxide-Regulated Nuclear Translocation of the Intracellular Chloride Channel CLIC4

#### Jian Huang, Laboratory of Molecular Immunoregulation

Transactivation of the Epidermal Growth Factor by Formylpeptide Receptor FPR in Glioblastoma Cells

### **3. Molecular and Cell Biology I** (Conference Room I)

Moderators: Michael Rosu-Myles, Ph.D., and Veronica Hall, Ph.D.

### Luciann Cuenca, Laboratory of Cell Biology

The Catalytic Cycle of ATP Hydrolysis by P-glycoprotein (ABCB1): Role of a Concerved H-Loop Subdomain in Nucleotide-Binding Domains

### Martin Mendoza, Pediatric Oncology Branch

Defining the Ezrin and Chloride Intracellular Channel 4 Interaction in Metastasis

#### **Jill Paterson,** Laboratory of Cell Biology

Distinct Molecular Weight Forms of ABCB6 Localize to Specific Cellular Membranes

# Evi Soutglou, Laboratory of Receptor Biology and Gene Expression

Positional Stability of Single Double-Strand Breaks in Living Mammalian Cells

### Xiaohong Wang, HIV and AIDS Malignancy Branch

MicroRNAs in Cervical Cancer and Cervical Cancer-Derived Cell Lines and Their Possible Roles in Regulating HPV Gene Expression

# 4. Signal Transduction and Gene Transcription and Genomics, Proteomics, and Bioinformatics Combined (Conference Room 3)

Moderators: Stephen Maher, Ph.D., and Swati Choksi, Ph.D.

### Yolanda Dale, Laboratory of Metabolism

Calpain Mediates the Dioxin-Induced Activation and Down-Regulation of the Aryl Hydrocarbon Receptor

# Rebecca Ohman, Laboratory of Cancer Biology and Genetics

PKCα Mediates the Proinflammatory Response of Keratinocytes to TNFα

### Jui Pandhare, Laboratory of Comparative Carcinogenesis

The Importance of Proline Metabolism Under Conditions of Nutrient Stress

# Vladimir Valera, Laboratory of Pathology

Protein Expression Profiling and Its Correlation with the Malignant Phenotype in Inherited and Sporadic Renal Cell Carcinomas

# Francesca Scrimieri, Genetics Branch

### Genomic and Expression Profiling in Osteosarcoma

12:00 p.m. **Mentored and General Lunch** (*Grand Ballroom – First Floor*)

1:15 p.m. Keynote Speaker III: "Molecular Crosstalks Between Tumor and Surrounding Cells Mark

Cancer Progression" (Crystal Ballroom I)

Stuart H. Yuspa, M.D., Laboratory of Cancer Biology and Genetics, CCR, NCI

Moderators: M. Margaret Pratt, Ph.D., and Kwang Suh, Ph.D.

2:30 p.m. Break

2:45 p.m. Concurrent Workshops II

1. Insights into Publishing in Top Journals (Crystal Ballroom I)

"Behind-the-Scenes Look at the Editorial Process at Molecular Cell"

Feng Chen, Ph.D., Molecular Cell Magazine

"Publishing in Science Magazine"

Laura Zahn, Ph.D., Science Magazine

Moderators: Arti Santhanam, Ph.D., and Swati Choksi, Ph.D.

2. Interview Techniques and Resume Critique (Conference Rooms 4-6)

"Sharpening Your Job Interview Skills"

Barrett Whitener, M.A., Premier Public Speaking, Inc.

"Preparing a Marketing CV/Resume to Land Interviews"

Stephen R. Gallison, Professional Outplacement Assistance Center of Maryland Moderators: Stephen Maher, Ph.D., and Haiqing Li, M.D., Ph.D.

4:00 p.m. **Professional Resume Critique** (Conference Rooms 4-6 by appointment)

Stephen R. Gallison, Professional Outplacement Assistance Center of Maryland

4:00 p.m. **Poster Session II** (Crystal Ballroom II)

Molecular and Cell Biology II Immunology and Genetics

**Clinical and Translational Research** 

**Cancer Research Technology** 

5:45 p.m. **General and Mentored Dinner** (*Grand Ballroom – First Floor*)

6:45 p.m. Career Fair (Conference Rooms 1-3)

**Mentored Lunch Sign-up** (Registration Desk)

9:00 p.m. **Adjourn** 

# Thursday, March 1, 2007

7:00 a.m. **Continental Breakfast** (*Crystal Ballroom Foyer*)

**Registration Open** 

8:00 a.m. **Keynote Speaker IV: "From Immune Deficiency to Immune Therapy"** (Crystal Ballroom I)

Steven M. Holland, M.D., Laboratory of Clinical Infectious Diseases, NIAID

Moderators: Michael Rosu-Myles, Ph.D., and Véronique Pascal, Pharm.D., Ph.D.

#### 9:00 a.m. Break

# 9:15 a.m. Concurrent Oral Presentations II

## 5. Molecular and Cellular Biology II (Crystal Ballroom I)

Moderators: Jennifer Shen, Ph.D., and Gonzalo de la Rosa, Ph.D.

### Nabila Rasool, Laboratory of Pathology

Secretory Leukocyte Protease Inhibitor (SLPI) Contributes to Proliferation and Tumorigenicity of Ovarian Cancer Cells *In Vivo*, Independent of Its Protease-Inhibitory Function

# Chung-Pu Wu, Laboratory of Cell Biology

The P-Glycoprotein (ABCB1)-Specific Cytotoxic Thiosemicarbazone, NSC73306, Is a Poten Modulator of the Multidrug Resistance-Linked ABCG2 Transporter

# Ming Ji, Cancer and Developmental Biology Laboratory

Inhibitor of DNA Binidng 2 Regulates B Lymphopoiesis and Erythropoiesis via Interaction with Different Target Proteins

### Brian Booth, Mammary Biology and Tumorigenesis Laboratory

Evidence for a Tumorigenic Multipotent Cell in ErbB2 Mammary Carcinomas

#### Anjali Joshi, HIV Drug Resistance Program

Modulation of HIV Production by the Golgi-Localized Gamma Ear-Containing Arf-Binding (GGA) Proteins

#### **6. Immunology and Genetics** (Conference Rooms 4-6)

Moderators: Martin Guimond, Ph.D., and Swati Choksi, Ph.D.

# Hongchuan Li, Laboratory of Experimental Immunology

Genetic Control of Variegated KIR Gene Expression: Polymorphisms of the Bidirectional KIR3DL1 Promoter Are Associated with Distinct Frequencies of Gene Expression

#### Anat Ohali, Vaccine Branch

Anti-CD40-Mediated Expansion of High-Avidity Antigen-Specific CD8 Memory Cells Is IL-15 Dependent

#### Poonam Tewary, Laboratory of Molecular Immunoregulation

High-Mobility Group Box-1 (HMGB1) Protein Induces the Migration and Activation of Human Dendritic Cells and Acts as an Alarmin

# Changqing Yuan, Laboratory of Cell and Developmental Signaling

The Functions of Bwa Gene in Drosophila

#### Elena Ambrosino, Vaccine Branch

Counter-Regulation of Type I and Type II NKT Cells in Tumor Immunity

# 7. Clinical and Translational Research and Cancer Research Technology Combined

(Conference Room 1)

Moderators: Haiqing Li, M.D., Ph.D., and Heidi Erickson, Ph.D.

# Laura Johnson, Surgery Branch

Gene Transfer of Tumor Reactive T-Cell Receptors Confers both High Avidity and Tumor Reactivity to Non-Reactive PBMC and TIL

Gabrela Kramer-Marek, Radiation Oncology Branch Branch

Molecular Probe for In Vivo Monitoring of HER2 Expression by PET

Anil Shanker, Laboratory of Experimental Immunology

Therapeutic Benefit of Combining Proteasome Inhibition with TRAIL Receptor Agonist Antibody to Promote Tumor Cell Apoptosis

Jason Cheng, Radiation Oncology Branch

Monte Carlo Dosimetry Study for 6 MV Photon Beam Using Reduce Phase Space Method

Scott Martin, Genetics Branch

Applications of RNAi Screens in the Study of Cancer-Associated Processes

10:45 a.m. **Break** 

11:15 a.m. Concurrent Workshops III

1. Science Communication (Crystal Ballroom I)

"Speaking about Science"

Barrett Whitener, M.A., Premier Public Speaking, Inc.

"Writing about Science"

Maggie Meitzler, TechBooks Professional Publishing Group

Moderators: Gillian Whittaker, Ph.D., and Girish Patel, M.B.B.S., M.R.C.P., M.D.

2. Core Facilities and Support Services at NCI (Conference Rooms 4-6)

"Opening Remarks from the Director"

Timothy Harris, Ph.D., Director, Research Technology Program, SAIC-Frederick, Inc.

- "Science and Technology Partnerships"

  David Goldstein, Ph.D., Office of Science and Technology Partnerships, OD, CCR, NCI
- "Learning to Express and Purify Mammalian Proteins"

  James Hartley, Ph.D., Protein Expression Laboratory, Research Technology Program, SAIC-Frederick, Inc.
- "An Insider's Look at the Protein Chemistry: Molecular Interactions R Us"
  Robert Fisher, Ph.D., Protein Chemistry Laboratory, Research Technology Program, SAIC-Frederick, Inc.
- "Targeted and Discovery-Driven Proteomics within the Laboratory of Proteomics and Analytical Technologies"

**Timothy Veenstra, Ph.D.,** Laboratory of Proteomics and Analytical Technologies, Research Technology Program, SAIC-Frederick, Inc.

• "Development of Novel Microarray Platforms"

**David Munroe, Ph.D.,** Laboratory of Molecular Technology, Research Technology Program, SAIC-Frederick, Inc.

Moderators: Kwang Suh, Ph.D., and Jordan Irvin, Ph.D.

12:30 p.m. Mentored and General Lunch with Travel Awards (Grand Ballroom – First Floor)

1:45 p.m. Questionnaire and Closing Comments from the Retreat Committee

2:00 p.m. Adjourn

# 2007 CCR Fellows and Young Investigators Retreat Travel Award Winners

Congratulations!
Eight \$1,000 Travel Awards
Sponsored by the CCR Office of the Director

# **Outstanding Oral Presentations**

Anna Maria Calcagno Chung-Pu Wu Scott Martin Jason Cheng

# **Outstanding Poster Presentations**

Christophe Cataisson Timothy Iro Daniel Powell Matthew D. Hall